

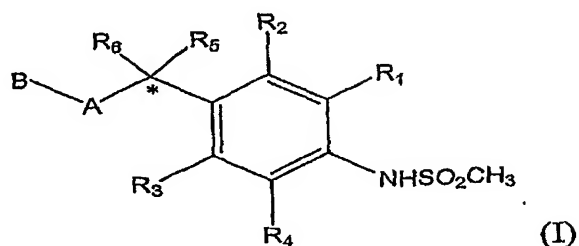
Amendments to the Claims:

The following listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1-14. (canceled)

15. (currently amended) A compound corresponding to formula (I) or a pharmaceutically acceptable salt or isomer thereof:



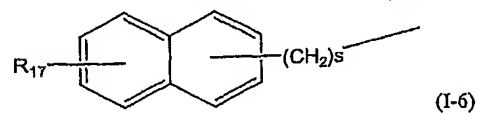
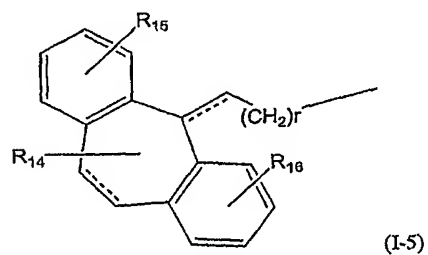
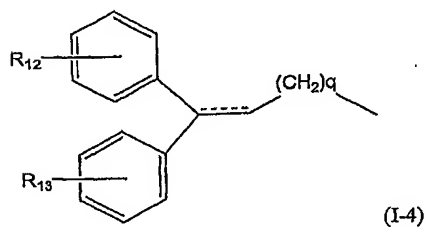
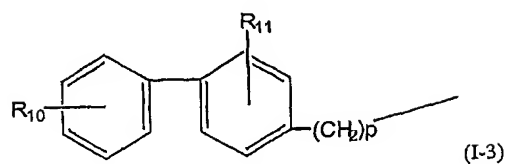
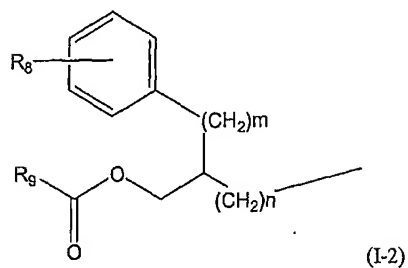
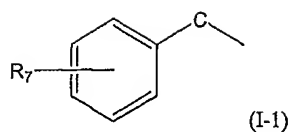
wherein:

A is CONH, NHCO, ~~NHC(=S)NH~~, or NHC(=O)NH;

R₁ to R₄ is independently a hydrogen, halogen atom, cyano group, nitro group, lower alkyl amine, lower alkoxy group having 1 to 3 carbon atoms, carboxylic acid, hydroxamic acid, alkyl ester group having 1 to 6 carbon atoms, alkyl amide group having 1 to 6 carbon atoms, benzylamide group, or a 5 or 6-member heterocyclic ring;

R₅ and R₆ are independently a hydrogen, hydroxyl group, amino group, straight or branched alkyl group having 1 to 6 carbon atoms, a cycloalkyl group having 1 to 6 carbon atoms, or a phenyl or benzyl group optionally substituted with at least one substituent selected from the group consisting of halogen atom, an amine group, and an alkyl group having 1 to 6 carbon atoms, provided that both of R₅ and R₆ are not hydrogen atoms simultaneously;

B is a group selected from



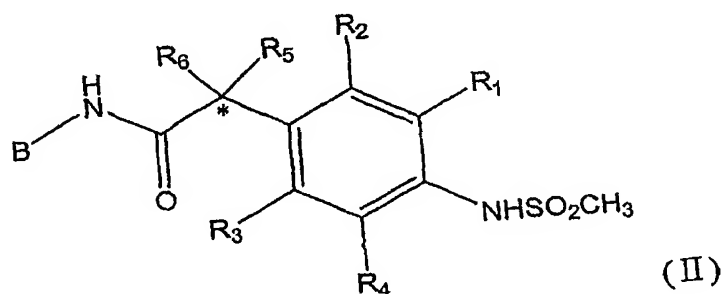
in which R_7 to R_{17} is independently a hydrogen atom, a halogen atom, or a straight or branched alkyl group having 1 to 6 carbon atoms optionally substituted with more than one halogen atom;

C is an alkyl, alkenyl, or alkynyl group having 1 to 5 carbon atoms which may include one or more heteroatoms, wherein each of m, n, p, q, r, and s is an integer of 0 to 3; and

an asteric mark * indicates a chiral carbon atom; and

(-----) mark indicates a double bond or single bond chain.

16. (previously presented) A compound according to claim 15, corresponding to formula (II) or a pharmaceutically acceptable salt or isomer thereof:



wherein,

R₁ to R₄ is independently a hydrogen, halogen atom, cyano group, nitro group, lower alkyl amine, lower alkoxy group having 1 to 3 carbon atoms, carboxylic acid, hydroxamic acid, alkyl ester group having 1 to 6 carbon atoms, alkyl amide group having 1 to 6 carbon atoms, benzylamide group, or a five or six-member heterocyclic ring; and

R₅ and R₆ are independently a hydrogen, hydroxyl group, amino group, straight or branched alkyl group having 1 to 6 carbon atoms, cycloalkyl group having 1 to 6 carbon atoms or a phenyl or benzyl group optionally substituted with at least one substituent selected from the group consisting of halogen atom, amine group and alkyl group having 1 to 6 carbon, provided that both of R₅ and R₆ are not hydrogen simultaneously

17. (previously presented) A compound according to claim 16, wherein said compound is at least one selected from the group consisting of:

N-(4-*tert*-butylbenzyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide (1-51, KMJ-372),
N-(4-*tert*-butylbenzyl)-2-[3-chloro-4-(methylsulfonylamino)phenyl]propionamide (1-52, KMJ-470),
N-(4-*tert*-butylbenzyl)-2-[3-bromo-4-(methylsulfonylamino)phenyl]propionamide (1-53, SH-173),
N-(4-*tert*-butylbenzyl)-2-[3-iodo-4-(methylsulfonylamino)phenyl]propionamide (1-54, SH-168),
N-(4-*tert*-butylbenzyl)-2-[3,5-difluoro-4-(methylsulfonylamino)phenyl]-propionamide (1-55, SH-285),
N-(4-*tert*-butylbenzyl)-2-[3-cyano-4-(methylsulfonylamino)phenyl]propionamide (1-56, SH-219),
N-(4-*tert*-butylbenzyl)-2-[3-methoxycarbonyl-4-(methylsulfonylamino)phenyl]-propionamide (1-57, JMJ-806),
N-(4-*tert*-butylbenzyl)-2-[3-carboxyl-4-(methylsulfonylamino)phenyl]-propionamide (1-58, KMJ-788),
N-4(*tert*-butylbenzyl)-2-[3-methoxycarbonyl-4-(methylsulfonylamino)phenyl]-propionamide (1-59, KMJ-838),
N-(4-*tert*-butylbenzyl)-2-[3-(benzylamino)carbonyl-4-(methylsulfonylamino)-phenyl]propionamide (1-60, KMJ-836),
N-(4-*tert*-butylbenzyl)-2-[3-piperidino-4-(methylsulfonylamino)phenyl]-propionamide (1-61, YS-65),
N-(4-*tert*-butylbenzyl)-2-[3-morpholino-4-(methylsulfonylamino)phenyl]-propionamide (1-62, YS-49),
N-(4-*tert*-butylbenzyl)-2-[3-(N-Boc)piperazino-4-(methylsulfonylamino)phenyl]-propionamide (1-63, YS-76),
N-(4-*tert*-butylbenzyl)-2-[3-piperazino-4-(methylsulfonylamino)phenyl]-propionamide (1-64, YS-79),
N-(4-*tert*-butylbenzyl)-2-[3-methoxy-4-(methylsulfonylamino)phenyl]-propionamide (1-65, CHK-717),

N-(4-tert-butylbenzyl)-2-[2-fluoro-4-(methylsulfonylamino)phenyl]propionamide
(1-66, KMJ-708),
N-(4-tert-butylbenzyl)-2-[2-chloro-4-(methylsulfonylamino)phenyl]propionamide
(1-67, KMJ-698),
N-(4-tert-butylbenzyl)-2-[4-(methylsulfonylamino)phenyl]propionamide
(2-7, KMJ-750),
N-(4-chloro)-2-[4-(methylsulfonylamino)phenyl]propionamide (2-8, YS-85),
N-(3,4-dichloro)-2-[4-(methylsulfonylamino)phenyl]propionamide (2-9, YS-97),
N-(4-tert-butylbenzyl)-(2S)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]-
propionamide (3-5, SU-834),
N-(4-tert-butylbenzyl)-(2R)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]-
propionamide (3-6, SU-824),
N-(4-chlorobenzyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide
(4-1, SH-291),
N-(4-chlorobenzyl)-2-[3-chloro-4-(methylsulfonylamino)phenyl]propionamide
(4-2, SH-290),
N-(4-chlorobenzyl)-2-[3-bromo-4-(methylsulfonylamino)phenyl]propionamide
(4-3, SH-335),
N-(3,4-dichlorobenzyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide
(4-4, SH-94),
N-(3,4-dichlorobenzyl)-2-[3-chloro-4-(methylsulfonylamino)phenyl]propionamide
(4-5, SH-286),
N-(3,4-dichlorobenzyl)-2-[3-bromo-4-(methylsulfonylamino)phenyl]propionamide
(4-6, SH-337),
N-(4-methylbenzyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide
(4-7, SH-351),
N-(4-isopropylbenzyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide
(4-8, KMJ-928),
N-(4-methoxybenzyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide
(4-9, SH-353),

N-(4-trifluoromethylbenzyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]-
propionamide (4-10, SH-93),
N-(4-phenylbenzyl)-2-(3-fluoro-4-(methylsulfonylamino)phenyl]propionamide
(4-11, KMJ-498),
N-(1-naphthylmethyl)-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide
(4-12, SH-92),
N-(1,2,3,4-tetrahydro-1-naphthalenyl)-2-[3-fluoro-4-methylsulfonylamino)phenyl]-
propionamide (4-13, SH-112),
N-[2-(4-tert-butylphenyl)ethyl]-2-[3-fluoro-4-(methylsulfonylamino)phenyl]-
propionamide (4-14, KMJ-374),
N-[3-(3,4-dimethylphenyl)propyl]-2-[3-fluoro-4-methylsulfonylamino)phenyl]-
propionamide (4-15, SU-770),
N-[3-(3,4-dimethylphenyl)propyl]-(2R)-2-[3-fluoro-4-methylsulfonylamino)-
phenyl]propionamide (4-16, SU-774),
N-[3-(3,4-dimethylphenyl)propyl]-(2S)-2-[3-fluoro-4-methylsulfonylamino)-
phenyl]propionamide (4-17, SU-776),
N-[3-(3,4-dimethylphenyl)-2-propenyl]-2-[3-fluoro-4-(methylsulfonylamino)-
phenyl]propionamide (4-18, KMJ-686),
N-[3-(4-chlorophenyl)propyl]-2-[3-fluoro-4-methylsulfonylamino)phenyl]-
propionamide (4-19, KMJ-518),
N-[3-(4-chlorophenyl)-2-propenyl]-2-[3-fluoro-4-methylsulfonylamino)phenyl]-
propionamide (4-20, KMJ-732),
N-benzyloxy-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide (4-21, SH-
109),
N-(benzhydryl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide
(4-22, SH-130),
N-(2,2-diphenylethyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide
(4-23, SH-116),
N-(3,3-diphenylpropyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide
(4-24, KMJ-378),

N-(3,3-diphenyl-2-propenyl)-2-[3-fluoro-4-methylsulfonylamino)phenyl]-propionamide (4-25,KMJ-724),
N-[3,3-di(4-methylphenyl)-2-propenyl]-2-[3-fluoro-4-methylsulfonylamino)-phenyl]propionamide (4-26,KMJ-908),
N-[3,3-di(4-fluorophenyl)-2-propenyl]-2-[3-fluoro-4-(methylsulfonylamino)-phenyl]propionamide (4-27,SH-135),
N-[2-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-yliden)ethyl]-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide (4-28,SH-199),
N-[2-(3,4-dimethylbenzyl)-3-pivaloxypropyl]-2-[4-(methylsulfonylamino)phenyl]-propionamide (5-1,CHK-512),
N-[2-(4-tert-butylbenzyl)-3-pivaloxypropyl]-2-[4-(methylsulfonylamino)phenyl]-propionamide (5-2,CHK-514),
2-[3-fluoro-4-(methylsulfonylamino)phenyl]-N-[2-(3,4-dimethylbenzyl)-3-pivaloxypropyl]propionamide (5-3,SU-542),
2-[3-fluoro-4-(methylsulfonylamino)phenyl]-N-[2-4-tert-butylbenzyl)-3-pivaloxypropyl]propionamide (5-4,SU-564),
N-[2-(3,4-dimethylbenzyl)-3-pivaloxypropyl]-2-[3-methoxy-4-(methylsulfonylamino)phenyl]propionamide (5-5,CHK-479),
N-[2-(4-tert-butylbenzyl)-3-pivaloxypropyl]-2-[3-methoxy-4-methylsulfonylamino)phenyl]propionamide (5-6,CHK-499),
N-[2-(3,4-dimethylbenzyl)-3-pivaloxypropyl]-2-[3-chloro-4-(methylsulfonylamino)-phenyl]propionamide (5-7,KNJ-472),
N-[2-(4-tert-butylbenzyl)-3-pivaloxypropyl]-2-[3-chloro-4-(methylsulfonylamino)-phenyl]propionamide (5-8, KMJ-690),
N-[(1R)-1-benzyl-2- (pivaloxy) ethyl]- (2S)-2- [3-fluoro-4- (methylsulfonylamino)-phenyl]propionamide (6-1, SU-730)*
N-[(1S)-1-benzyl-2-(pivaloxy)ethyl]- (2S)-2-[3-fluoro-4-(methylsulfonylamino)-phenyl]propionamide (6-2, SU-634),
N-[(1S)-1-benzyl-2-(pivaloxy)ethyl]- (2R)-2-[3-fluoro-4-methylsulfonylamino)-phenyl]propionamide (6-3, SU-636),

N-[(1R)-1-benzyl-2-(pivaloxy)ethyl]-(2R)-2-[3-fluoro-4-(methylsulfonylamino)-phenyl]propionamide (6-4, SU-728),
N-[(2R)-2-benzyl-3-(pivaloxy)propyl]-(2S)-2-[3-fluoro-4-(methylsulfonylamino)-phenyl]propionamide (6-5, SU-826),
N-[(2S)-2-benzyl-3-(pivaloxy)propyl]-(2S)-2-[3-fluoro-4-(methylsulfonylamino)-phenyl]propionamide (6-6, SU-830),
N-[(2S)-2-benzyl-3-(pivaloxy)propyl]-(2R)-2-[3-fluoro-4-(methylsulfonylamino)-phenyl]propionamide (6-7, SU-838),
N-[(2R)-2-benzyl-3-(pivaloxy)propyl]-(2R)-2-[3-fluoro-4-(methylsulfonylamino)-phenyl]propionamide (6-8, SU-818),
N-[(2R)-2-(4-tert-butyl)benzyl-3-(pivaloxy)propyl]-(2S)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide (6-9, MK-271),
N-[(2S)-2-(4-tert-butyl)benzyl-3-(pivaloxy)propyl]-(2S)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide (6-10, MK-272),
N-[(2S)-2-(4-tert-butyl)benzyl-3-(pivaloxy)propyl]-(2R)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide (6-11, MK-450),
N-[(2R)-2-(4-tert-butyl)benzyl-3-(pivaloxy)propyl]-(2R)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide (6-12, MK-452),
N-[(2R)-2-(4-tert-butyl)benzyl-3-(pivaloxy)propyl]-(2S)-2-[3-chloro-4-(methylsulfonylamino)phenyl]propionamide (6-13, MK-453),
N-[(2S)-2-(4-tert-butyl)benzyl-3-(pivaloxy)propyl]-(2S)-2-[3-chloro-4-(methylsulfonylamino)phenyl]propionamide (6-14, MK-451),
2-[3-fluoro-4-(methylsulfonylamino)phenyl]-2-methylpropionic acid (7-4, CHK-624),
2-(4-(methylsulfonylamino)phenyl)-2-methylpropionic acid (8-11),
2-[3-methoxy-4-(methylsulfonylamino)phenyl]-2-methylpropionic acid (8-12),
N-[2-(3, 4-dimethylbenzyl)-3-pivaloxypropyl]-2-[4-(methylsulfonylamino)phenyl]-2-methylpropionamide (9-1, CHK-520),
N-[2-(3,4-dimethylbenzyl)-3-pivaloxypropyl]-2-[3-fluoro-4-(methylsulfonylamino)-phenyl]-2-methylpropionamide (9-2, CHK-543),

N-[2-(3,4-dimethylbenzyl)-3-pivaloxypropyl]-2-[3-methoxy-4-(methylsulfonylamino)phenyl]-2-methylpropionamide (9-3, CHK-493),
N-[3-(3,4-dimethylphenyl)propyl]-2-[4-(methylsulfonylamino)phenyl]-2-methylpropionamide (9-4, CHK-591),
N-[3-(3,4-dimethylphenyl)propyl]-2-[3-fluoro-4-(methylsulfonylamino)phenyl]-2-methylpropionamide (9-5, CHK-656),
N-[3-(3,4-dimethylphenyl)propyl]-2-[3-methoxy-4-(methylsulfonylamino)phenyl]-2-methylpropionamide (9-6, CHK-600),
N-(4-tert-butylbenzyl)-2-[4-(methylsulfonylamino)phenyl]-2-methylpropionamide (9-7, CHK- 715),
N-(4-tert-butylbenzyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]-2-methylpropionamide (9-8, CHK-655),
N-(4-tert-butylbenzyl)-2-[3-methoxy-4-(methylsulfonylamino)phenyl]-2-methylpropionamide (9-9),
1-[3-fluoro-4-(methylsulfonylamino)phenyl]cyclopropane carboxylic acid (10-5),
1-[4-(methylsulfonylamino)phenyl]cyclopropane carboxylic acid (11-7, CHK-530),
1-[3-methoxy-4-(methylsulfonylamino)phenyl]cyclopropane carboxylic acid (11-8),
N-[2-(3,4-dimethylbenzyl)-3-pivaloxypropyl]-1-[4-(methylsulfonylamino)phenyl]cyclopropane carboxamide (12-1, CHK-533),
N-[2-(3,4-dimethylbenzyl)-3-pivaloxypropyl]-1-[3-fluoro-4-(methylsulfonylamino)phenyl]cyclopropane carboxamide (12-2, CHK-538),
N-[2-(3,4-dimethylbenzyl)-3-pivaloxypropyl]-1-[3-methoxy-4-(methylsulfonylamino)phenyl]cyclopropane carboxamide (12-3, CHK-541),
N-[3-(3,4-dimethylphenyl)propyl]-1-[4-(methylsulfonylamino)phenyl]cyclopropane carboxamide (12-4, CHK-590),
N-[3-(3,4-dimethylphenyl)propyl]-1-[3-fluoro-4-(methylsulfonylamino)phenyl]cyclopropane carboxamide (12-5),
N-[3-(3,4-dimethylphenyl)propyl]-1-[3-methoxy-4-(methylsulfonylamino)phenyl]cyclopropane carboxamide (12-6, CHK-632),

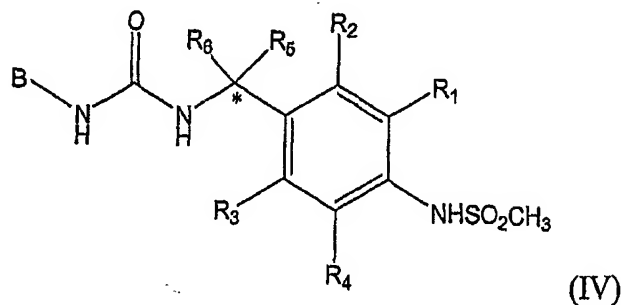
N-(4-*tert*-butylbenzyl)-1-[4-(methylsulfonylamino)phenyl]cyclopropane
carboxamide (12-7, CHK-719),

N-(4-*tert*-butylbenzyl)-1-[3-fluoro-4-(methylsulfonylamino)phenyl]cyclopropane
carboxamide (12-8, CHK-659), and

N-(4-*tert*-butylbenzyl)-1-[3-methoxy-4-(methylsulfonylamino)phenyl]cyclopropane
carboxamide (12-9, CHK-718).

18-19. (canceled)

20. (withdrawn) A compound according to claim 15, corresponding to formula
(IV), or a pharmaceutically acceptable salt or isomer thereof :



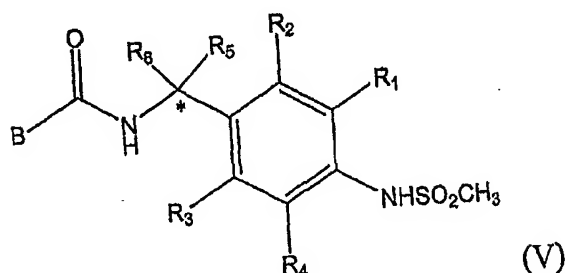
wherein,

R₁ to R₄ is independently a hydrogen, halogen atom, cyano group, nitro group, lower alkyl amine, lower alkoxy group having 1 to 3 carbon atoms, carboxylic acid, hydroxamic acid, alkyl ester group having 1 to 6 carbon atoms, alkyl amide group having 1 to 6 carbon atoms, benzylamide group, or five or six-member heterocyclic ring; and

R₅ and R₆ are independently a hydrogen, hydroxyl group, amino group, straight or branched alkyl group having 1 to 6 carbon atoms, cycloalkyl group having 1 to 6 carbon atoms, or a phenyl or benzyl group optionally substituted with at least one substituent selected from the group consisting of a halogen atom, amine group and alkyl group having 1 to 6 carbons, provided that both of R₅ and R₆ are not hydrogen atoms simultaneously.

21. (withdrawn) A compound according to claim 20, wherein said compound is N-(4-*tert*-butylbenzyl)-N'-1-[4-(methylsulfonylamino)phenyl]ethyl}urea (23-1, MK-82), or N-(4-*tert*-butylbenzyl)-N'-1-[3-fluoro-4-(methylsulfonylamino)phenyl]ethyl}- urea (23-2, MK-205).

22. (previously presented) A compound according to claim 15, corresponding to formula (V), or a pharmaceutically acceptable salt or isomer thereof :



wherein,

R₁ to R₄ is independently a hydrogen, halogen atom, cyano group, nitro group, lower alkyl amine, lower alkoxy group having 1 to 3 carbon atoms, carboxylic acid, hydroxamic acid, alkyl ester group having 1 to 6 carbon atoms, alkyl amide group having 1 to 6 carbon atoms, benzylamide group, or a five or six-member heterocyclic ring; and

R₅ and R₆ are independently a hydrogen, hydroxyl group, amino group, straight or branched alkyl group having 1 to 6 carbon atoms, cycloalkyl group having 1 to 6 carbon atoms, or a phenyl or benzyl group optionally substituted with at least one substituent selected from the group consisting of halogen atoms, amine groups and alkyl groups having 1 to 6 carbons, provided that both of R₅ and R₆ are not hydrogen atoms simultaneously.

23. (previously presented) A compound according to claim 22, wherein said compound is selected from the group consisting of:

N-{1-[3-fluoro-4-(methylsulfonylamino)phenyl]ethyl}-3-(4-tert-butylphenyl)-acetamide (24-1, KMJ-586),
N-1-[3-fluoro-4-(methylsulfonylamino)phenyl]ethyl}-3-(4-tert-butylphenyl)-propanamide (24-2, KMJ-552),
N-{1-[3-fluoro-4-(methylsulfonylamino)phenyl]ethyl}-3-(4-tert-butylphenyl)-2-propanamide (24-3, KMJ-570),
N-{1-[3-fluoro-4-(methylsulfonylamino)phenyl]ethyl}-3-(3,4-dimethylphenyl)-propanamide (24-4, CHK-602),
N-1-[3-fluoro-4-(methylsulfonylamino)phenyl]ethyl}-3-(3,4-dimethylphenyl)-2-propanamide (24-5, CHK-651),
N-1-[3-fluoro-4-(methylsulfonylamino)phenyl]ethyl}-3-(3,4-dimethylphenyl)propanamide (24-6, CHK-534),
N-{1-[3-fluoro-4-(methylsulfonylamino)phenyl]ethyl}-3-(4-chlorophenyl)-2-propanamide (24-7, KMJ-558), and
N-{1-[3-fluoro-4-(methylsulfonylamino)phenyl]ethyl}-3-(3,4-dimethylphenyl)-butanamide (24-8, CHK-647).

24. (previously presented) A compound according to claim 15, wherein R₁ to R₄ is independently a hydrogen, halogen atom, cyano group, nitro group, lower alkyl amine, lower alkoxy group having 1 to 3 carbon atoms, carboxylic acid, hydroxamic acid, alkyl ester group having 1 to 6 carbon atoms, alkyl amide group having 1 to 6 carbon atoms, benzylamide group, or a five or six-member heterocyclic ring.

25. (previously presented) A compound according to claim 15, wherein R₅ and R₆ are independently a hydrogen, hydroxyl group, amino group, straight or branched alkyl group having 1 to 6 carbon atoms, cycloalkyl group having 1 to 6 carbon atoms, or a phenyl or benzyl group optionally substituted with at least one substituent selected from the group consisting of a halogen atom, amine group or an alkyl group having 1 to 6 carbons.

26. (previously presented) A pharmaceutical composition comprising a compound according to claim 15 as an active ingredient in an effective vanilloid receptor antagonizing amount, together with a pharmaceutically acceptable carrier or diluent.

27. (previously presented) A method of treating acute pain, chronic pain, neuropathic pain, post-operative pain, migraine, arthralgia, neuropathies, nerve injury, diabetic neuropathy, neurodegeneration, neurotic skin disorder, stroke, urinary bladder hypersensitiveness, irritable bowel syndrome, a respiratory disorder, irritation of skin, eye or mucous membrane, ferveescence, coughing, stomach-duodenal ulcer, or inflammatory bowel disease caused by the vanilloid receptor antagonistic activity, in a patient suffering therefrom, said method comprising administering to said patient a pharmaceutically effective amount of at least one compound according to claim 15.

28. (previously presented) Method of treating or inhibiting pain or inflammation, in a patient suffering therefrom, said method comprising administering to said patient a pharmaceutically effective amount of at least one compound according to claim 15.

29. (previously presented) The method according to claim 27, wherein the respiratory disorder is asthma or chronic obstructive pulmonary disease.